

SHAMAYEV, Matvey Fedorovich; KAPLUN, Fayvel' Shmuylovich; TSARENKO, A.P.,  
redaktor; KHITROV, P.A., tekhnicheskiy redaktor

[Handbook for the weigher] Rukovodstvo vesovshchiku. Izd. 2-3.  
Moskva, Gos.transp.zhel-dor. izd-vo, 1955. 305 p. (MIRA 9:3)  
(Railroads--Freight)

KAPLIN, F.Sh.; SHAMAYEV, M.F.; GULEV, Ya.F., red.; KHITROV, P.A.,  
tekhn. red.

[Manual for the weighmaster] Rukovodstvo vesovshchiku. Mo-  
skva, Transzheldorizdat, 1951. 323 p. (MIRA 16:7)

1. Russia (1923- U.S.S.R.) Ministerstvo putey soobshcheniya.  
(Railroads--Freight) (Weighing machines)

SHAMAYEV, M.I.

Blood supply of the knee joint. Vrach.delo no.12:1303-1305 D '57.  
(MIRA 11:2)

1. Kafedra topograficheskoy anatomii i operativnoy khirurgii (zav.  
prof. S.T.Novitskiy [deceased]) i kafedra normal'noy anatomii  
(zav. - zasluzhennyy deyatel' nauki, prof. M.S.Spirov) Kiyevskogo  
meditsinskogo instituta.  
(KNEE JOINT--BLOOD SUPPLY)

SHAMAYEV, M. I., Cand Med Sci -- (diss) <sup>chp</sup> "Data on blood circulation  
of the <sup>human</sup> knee joint ~~in...~~" Kiev, 1958. 11 pp (Kiev Order of Labor  
Red Banner Med Inst im Academician A. A. Bogomolets), 200 copies  
(KL, 15-58, 119)

-22-

SHAMAYEV, M.I. (Kiyev, ul. Geroyev Revolyutsii, d. 4a, kv. 91)

Blood vessels of the synovial membrane of the human knee joint.  
Nov.khir.arkh. no.6:73-77 N-D '58. (MIRA 12:3)

1. Kafedra topograficheskoy anatomii i operativnoy khirurgii (zav. -  
prof. S.T. Novitskiy) i kafedra normal'noy anatomii (zav. - zasl.  
deyatel' nauki prof. M.S. Spirov) Kiyevskogo meditsinskogo instituta.  
(KNEE--BLOOD SUPPLY)  
(SYNOVIAL MEMBRANES)

SHAMAYEV, M.I.

Material on the blood supply of the human knee joint. Vrach.delo  
no.8:869-870 Ag '58 (MIRA 11:8)

1. Kafedra normal'noy anatomii (zav. - zaslyzhennyy deyatel'nauki,  
prof. M.S. Spirov) Kiyevskogo meditsinskogo instituta.  
(KNEE--BLOOD SUPPLY)

SHAMAYEV, M.I. [Shamalev, M.I.]

New data on the formation time of the Devonian diapir structure  
on the Slavyansk dome in the Donets Basin. Dop. AN URSR no. 6:  
797-800 '64. (MIRA 17:9)

1. Donetskiy politekhnicheskii institut. Predstavleno akademikom  
AN UkrSSR V.B.Porfir'yevym [Porfyr'iev, V.B.].

KIREYEVA, G.D.; SHAMAYEV, M.I.

First find of Fusulinidae in the Kartamysh series of the Donets  
Basin. Biul. MOIP. Otd. geol. 40 no.4:61-66 J1-12 '65.  
(MIRA 18:9)



SHAMAYEV, V. I., Cand Chem Sci -- (diss) "A Neutron Activation Analysis of Several Semiconducting Materials." Moscow, 1960, 11 pp, (Academy of Sciences USSR; Institute of Geochemistry and Analytical Chem in V. I. Vernadskiy, Academy of Sciences USSR) 200 copies, no price given (KL, 21-60, 119)

20655

S/186/60/002/005/015/017  
AO51/A130

55230

AUTHOR: Shamayev, V. I.

TITLE: An analysis of certain micro-mixtures in selenium and tellurium by the neutron activation method

PERIODICAL: Radiokhimiya, v. 2, no. 5, 1960, 624 - 629

TEXT: The article describes a method developed for determining the micro-quantities of tungsten, molybdenum, sulfur, phosphorous and zinc in selenium and tellurium of high purity, using the neutron activation method. The method is said to be based on the irradiation of the samples being analysed in a nuclear reactor, where, as a result of a nuclear reaction of the  ${}_Z^A(n, ){}_Z^{A+1}$ -type, radioactive isotopes of the irradiated elements are formed the activity of which serves as the measure of the quantity of the elements determined. The principle of the described method has been outlined before by A.A. Smales (Ref. 1: Atomics, 4, 3, 55, 1953), U. Schidewolf (Ref. 2: Angew. Chem., 70, 7, 181, 1958), W. Meinke (Ref. 3: Science, 121, 177, 1955)

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S/186/60/002/005/015/017  
Ao51/ A130

An analysis of certain ....

and I. P. Alimarin, Yu. V. Yakovlev, A. I. Zharin (Ref. 4: V. sb.: *Primeneniye Mechen. atomov v analit. khimii*, 58, Izd. AN SSSR, M., 1956). The author of the present article used the standard method of the activation analysis based on the simultaneous irradiation of both the analysed sample and known quantities of salts of the elements under analysis. Table 1 lists the nuclear constants of the isotopes used and the theoretical sensitivity of the determination under the following conditions: irradiation time - 20 days in a neutron stream of  $8.7 \cdot 10^{12}$  n/cm<sup>2</sup> · sec., measured activity - 40 days per sec. The analytical procedure was briefly as follows: the standard samples were prepared by successive dissolution of the salt solutions of the elements being determined of the grading "kh. ch." to a concentration of the order of  $10^{-4}$  -  $10^{-5}$  g/ml. 0.1 ml of this solution was introduced into a quartzite box, evaporated till dry at a temperature less than 100°C and was irradiated under conditions, identical to that of the analysed sample. After irradiation the contents of the box were dialkalized by diluted solutions of acids (For P, Zn and S) or of alkalies (for W and Mo) by adding the corresponding non-active carriers, the solution was transferred to a measuring flask, from which aliquotte amounts were taken off for preparing standard samples of the required activity. Salts-carriers of the

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A051/A130

An analysis of certain .....

determined elements were added to these, of quantities equal to those of the substance in the preparations intended for the measurement of the activity in the analysed sample and in the standards. The standards were subjected to a two- and three-fold radiochemical purification. After irradiation, the weighed portion of the analysed sample (0.5 - 1 gr) was primed at the surface with diluted hot HCl in order to remove possible impurities on the surface and was dissolved in heating, in a minimum volume of aqua regia. Solutions of salt-carriers, in quantities of 10 - 20 mg of each determined element were added to the obtained solution, and this solution was carefully evaporated until dry. The residue was dissolved in a 3 n HCl and by the action of hydrochloric hydrazine the residue was separated out of elementary selenium (tellurium), which was filtered off and rejected. By three-fold precipitation of these elements, by adding fresh portions of selenic or telluric acids the analysed solution was completely purified of radioactive isotopes of selenium (or tellurium). Then the separation and radiochemical purification was undertaken of the analysed elements according to the scheme presented in Figure 1. Tungsten was separated out in the form of tungstic acid, purified by coprecipitation of the radioactive admixtures with a residue of iron hydroxide and reprecipitation of the

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A051/A130

An analysis of certain ....

tungstic acid. The molybdenum was separated out in the form of lead molybdate from an acetic acid solution, purified by extracting with ether from the hydrochloric solution and precipitation of the -benzoinoxymate of molybdenum. The phosphorous was separated out in the form of magnesium-ammonia, purified by precipitation of ammonium phosphormolybdate, co-precipitation of the admixtures with a residue of arsenic sulfide and repeated precipitation of the magnesium-ammonium phosphate. The sulfur was separated out in the form of barium sulfate, purified by boiling the residue with aqua regia and by reprecipitation of the  $\text{BaSO}_4$  residue. The zinc was separated out in the form of a sulfide from the acetic acid medium, purified by precipitation of the admixtures with the residues of the lead hydroxide from the ammonium medium, with the residues of the cobalt hydroxide from a 1 n NaOH and by precipitation of the zinc thiocyanate mercurate. The final preparations intended for the determination of the activity were filtered on glass assembly filters and their activity was measured on an apparatus of the B type, with a frontal counter CM-2B(SI-2B). Since during the analysis the isotope dilution method is used, after the measurement of the activity and identification of the extracted radioisotopes, a determination

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A051/A130

An analysis of certain ....

was made of chemical yields of the carriers by the gravimetric method, using the corresponding weight forms of the determined elements. In determining the % content of phosphorous in the analysed samples, the possibility of the formation of the radioactive isotope of phosphorous - $P^{32}$ , was considered from the sulfur owing to the side nuclear reaction with fast neutrons:  $S^{32} (n, p) P^{32}$ . A check of the radiochemical purity of the extracted preparations showed that the latter was satisfactory when following the given scheme and yields of 25 - 80 % of the carriers could be obtained. The practical sensitivity of the determination of the different elements is given as being within the limits of  $10^{-6}$  -  $10^{-9}$  g. The accuracy of the determination of the various elements for the concentration of the order  $10^{-3}$  -  $10^{-7}$  % is 10 - 40 %. The time of the analysis (not considering the time of irradiation) is equal to 15 - 20 manhours. There are 3 tables, 2 figures and 18 references: 2 Soviet-bloc, 16 non-Soviet-bloc. The four recent English language publications read as follows: J. F. Cosgrove, G. H. Morrison, Anal. Chem., 29, 7, 1017, 1957; B. Tompson, B. Strause, M. Leboeuf, Anal. Chem., 30, 6, 1023, 1958; J. Gaittet, Ph. Albert, C. R. Acad. Sci., 247, 21, 1861, 1958; W. A. Brooksbank, G. W. Ledicotte, J. A. Dean, Anal. Chem., 30, 11, 1785, 1958.

Card 5/7

SHAMAYEV, V.I.; SAURKIN, O.F.

Determination of a microconcentration of gold in high purity  
selenium. Izv.vys.ucheb.zav.; khim.i khim tekhn. 3 no.1:66-68  
'60. (MIRA 13:6)

1. Kafedra tekhnologii radioaktivnykh, redkikh i rasseyennykh  
elementov Moskovskogo khimiko-tekhnologicheskogo instituta imeni  
D.I. Mendeleyeva.  
(Gold--Analysis) (Selenium--Analysis)

ZVIAGINTSEV, O.Ye.; SHAMAYEV, V.I.

Determination of certain microimpurities in high-purity  
selenium. Report No.3. Zhur.anal.khim. 15 no.3:325-328  
My-Je '60. (MIRA 13:7)

1. D.I.Mendeleev Moscow Chemico-Technological Institute.  
(Selenium--Analysis)



SHAMAYEV, V.N., fel'dsher (stantsiya Mayna Ul'yanovskoy oblasti).

Health education in rural areas. Fel'd. i akush. 23 no.12:41 D'58

(MIRA 11:12)

(MAYNA (ULYANOVSK PROVINCE)--HEALTH EDUCATION)

8(4)

SOV/112-59-4-7270

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 4, p 117 (USSR)

AUTHOR: Chizhov, V. A., and Shamayev, Yu. I.

TITLE: Use of High Frequency Currents in Glass Welding

PERIODICAL: V sb.: Prom. primeneniye tokov vysokoy chastoty. Riga, 1957,  
pp 356-360

ABSTRACT: Investigating the effect of temperature within 20-700°C and of frequency on the conductivity of some glasses has led to the practical usage of 3 types of glass heating: (1) at lower temperatures -- a high-frequency dielectric-loss heating; (2) from 500°C on -- through-conductance heating (slightly dependent on frequency); (3) at a temperature over 1,000°C -- induction heating because the electrical conductivity abruptly rises. Two methods of heating a glass edge for welding purposes are presented: (1) a conducting-coating method and (2) a combined gas-flame and electric method that employs a 0.3-1.5-mc, 20-kw high-frequency oscillator. The gas flame

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Use of High Frequency Currents in Glass Welding

serves for a preliminary heating. The burners are jointly used as electrodes. The influence of a number of phenomena upon welding conditions has been investigated.

L.A.G.

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SHAMAYEV, Yu. M., Engineer

"New Methods of Oscillographic Recording of Superhigh Frequencies." Sub 26 Oct 51,  
Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov

Dissertations presented for science and engineering <sup>\*</sup>degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

\* Candidate Technical Sciences.

Shamayev, Yu. M.

AID P - 945

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 14/25

Authors : Bogolyubov, V. Ye., Kand. of Tech. Sci., and  
Shamayev, Yu. M., Kand. of Tech. Sci., Moscow

Title : Electrolytic cell with the least distorting wall -  
reflection effect

Periodical : Elektrichestvo, 10, 68-72, 0 1954

Abstract : The use of the electrolytic cell prevails in the study of  
models of various kinds of fields: electrostatic, magnetic,  
electromagnetic, temperature, hydrodynamic and others. Al-  
so, certain problems of the theory of electric circuits can  
be solved with the help of the cell. However, reflections  
of the field from the cell walls have a distorting effect,  
which can be eliminated by screening, or greatly reduced  
by the proper selection of conductivity of the cell walls.  
The method of selection is discussed. Seven diagrams,  
9 references (1922-1952).

Institution : Moscow Power Institute im. Molotov

Submitted : My 17, 1954

Shamayev, Yu. M.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 22 - 26/48

Authors : Bogolyubov, V. E., and Shamayev, Yu. M.

Title : Electrolytic bath with semi-conductive baths

Periodical : Dok. AN SSSR 98/3, 423-426, Sep 21, 1954

Abstract : A method for the selection of the conductivity ratio of the electrolyte and the walls of the bath for the purpose of obtaining a minimum hindrance potentials is presented. The necessity of considering the reflected images from two boundaries (electrolyte - wall of bath and wall of bath - surrounding medium); in the case of a wall with infinite conductivity, is explained. A complete solution for such a problem, derived by the method of image reflection with consideration of the boundary conditions, is described. Five USSR references (1943-1952). Graph; drawing; diagrams.

Institution : The V. M. Molotov Energetics Institute, Moscow

Presented by: Academician S. A. Lebedev, March 1, 1954

SHAMAYEV, Ye. M.

and

BOGOLYUBOV, V. Ye.

"The Use of Semiconductor Coverings on the Walls of an Electrolytic Bath for Decreasing Distortion," pp 240-250, ill, 10 ref.

Abst: A method for substantial reduction of noise potential, as compared with the actual potential, consisting of an application of semiconducting coating of the bath walls, is suggested. The advantages of such coatings are pointed out.

SOURCE: Trudy Moskovskogo Energeticheskogo In-ta im. V. M. Molotova  
MVO SSSR (Works of the Moscow Energetics Institute imeni, V. M. MOLOTOV  
of the Ministry of Higher Education SSSR), no 18, Electric Vacuum  
Technology and Instrument Building, Moscow-Leningrad, Gosenergoizdat, 1956

SUM 1854

SHAMAYEV, Yu. M.

3

Decrease of the distortions of the fields which form in an electrolytic bath. Yu. M. Shamaev and N. G. Katkov (V. M. Molotov Inst. Energetics, Moscow). *Pribory i Tekh. Eksperimenty* 1956, No. 2, 94-8. The available nonconducting walls for electrolytic baths cause a field distortion, such that the model customarily drawn (straight lines of flux from cathode to anode) is actually distorted. A math. calcn. is undertaken and drawings are presented of the shapes of the walls of such baths, so that fields are produced which resemble those in the textbooks. Werner Jacobson

MT



BOGOLYUBOV, V.Ye., kandidat tekhnicheskikh nauk; SHAMAYEV, Yu.M., kandidat tekhnicheskikh nauk.

Using semiconducting coatings to reduce distortions due to the walls of electrolytic tanks. Trudy MEI no.18:240-259 '56.  
(MIRA 10:1)

1. Kafedra teoreticheskikh osnov elektrotekhniki.  
(Electric fields) (Semiconductors)

18(3)

AUTHORS:

SOV/161-58-3-1/27  
Shamayev, Yu. M., Candidate of Technical Sciences, Docent  
(Moscow), Lisitsyn, G. F., Candidate of Technical Sciences,  
Assistant (Moscow), Pirogov, A. I., Jr. Scientific Collabor-  
ator (Moscow)

TITLE:

Methods and Results of Measurements of the Static and Dynamical  
Characteristics of Ferrites With Rectangular Loop of the  
Hysteresis (Metodika i rezul'taty izmereniy staticheskikh i  
dinamicheskikh kharakteristik ferritov s pryamougol'noy petley  
gisterezisa)

PERIODICAL:

Nauchnyye doklady vysshey shkoly. Elektromekhanika i avtomatika,  
1958, Nr 3, pp 3-17 (USSR)

ABSTRACT:

In the first chapter it is pointed out that the behavior of  
ferrite cores is known under static conditions, and deriva-  
tion of the differential equation for the general case of  
dynamic magnetic induction is outlined. Work was carried out  
at the Kafedra teoreticheskikh osnov elektrotekhniki Moskovskogo  
ordena Lenina energeticheskogo instituta (Chair for the  
Theoretical Foundations of Electrical Engineering at the  
Institute of Power Engineering, Moscow) which was awarded  
the Order of Lenin. An improved type of galvanometer was used

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SOV/161-58-3-1/27

Methods and Results of Measurements of the Static and Dynamical Characteristics of Ferrites With Rectangular Loop of the Hysteresis

for the investigations. For weak fields up to 5 oe the generators 26 I and GIS-2 were used as pulse generators, and for fields above 5 oe a special generator was developed. A basic scheme for the experimental arrangement is then given (Fig 4) with photographs of several oscillograms (Figs 3, 6). In connection with the results of statical tests, a diagram (Fig 7) shows the reciprocal value of the time needed for magnetization as a function of the external magnetic field of the ferrites VT-2. Next, derivation of induction with respect to time as a function of the external field is given (Fig 8), and in the third diagram (Fig 9) the variation of induction with respect to time as a function of the reciprocal pulse increase is given. The two first diagrams show an initial linear increase with increasing field strength, and with higher values of field strength increase becomes less. Next, the results obtained by investigations of the influence exercised by temperature within the range of from  $-60^{\circ}\text{C}$  to just below Curie point (Figs 10, 11), and the results obtained by investigating 9 types of ferrites are given by a table. When dealing with the dynamical tests, the corresponding differen-

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tial equation is first written down, in which the terms with derivatives of a higher degree are neglected. Next, the variation of induction with time in dependence of the external field strength is investigated and the results obtained are shown in form of a diagram (Fig 12). The magnetic resistance and the shift coefficient, and, in conclusion, the time needed for magnetic reversal are investigated. Finally, the similarity to the magnetic reversal in ferrites with rectangular hysteresis loop of a great variety of types is dealt with. The other figures show the following: Figure 1: a representation of the dynamical characteristic in form of a surface with the coordinates  $B$ ,  $H$ ,  $\frac{dB}{dt}$ ; figure 2: a schematical drawing of the pulse fields generated by the generators; figure 5: hysteresis loop; figure 13: the dependence of  $r_o(B) \left[ = \frac{dB/dt}{H - H_s} \right]$  on induction; figure 14: the surface of the shift coefficient; figure 15: the curve of magnetic reversal

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Methods and Results of Measurements of the Static and Dynamical Characteristics of Ferrites With Rectangular Loop of the Hysteresis

$\frac{1}{\tau} = f_1(H_m)$ ; figure 16:  $\frac{\tau_{fr}}{\tau} = f(H_m/H_{cr})$ . ( $\tau_{fr}$  = time for impulse front;  $\tau$  = time for magnetic reversal;  $H_m$  = amplitude of the external field;  $H_{cr}$  = critical value of the external amplitude in which  $\tau_{fr}$  becomes  $\tau$ ). There are 16 figures, 1 table, and 7 references, 5 of which are Soviet.

1. This article was recommended for publication by the Kafedra teoreticheskikh osnov elektrotekhniki Moskovskogo energeticheskogo instituta (Chair for the Theoretical Fundamentals of Electrical Engineering at the Moscow Institute of Power Engineering)

ASSOCIATION: Kafedra teoreticheskikh osnov elektrotekhniki Moskovskogo energeticheskogo instituta (Chair for the Theoretical Fundamentals of Electrical Engineering at the Moscow Institute of Power Engineering)

SUBMITTED: June 3, 1958

Carb 4/4  
APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001548420015-1"

9(9)  
AUTHORS: Shamayev, Yu.M., and Konstantinov, S.G. SOV/142-58-6-13/20

TITLE: Computation of the Relative Sensitivity of a Deflection System With Travelling Waves (Raschet otnositel'noy chuvstvitel'nosti otklonyayushchey sistemy s begushchey volnoy)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Radiotekhnika, 1958, Nr 6, pp 719-723 (USSR)

ABSTRACT: The article deals with the computation of the dynamic sensitivity of a deflection system with travelling waves (DSTW), in the form of a semi-circular ribbon system, under synchronous and asynchronous conditions of beam motion, without accounting for dispersion and reflection in the system. In oscillographs for use with VHF and short duration video-impulses, ordinary methods of extending the frequency range of the scope mechanism - e.g. shortening the deflection system and/or increasing the deflection voltage - are not adequate because they decrease the sensitivity of the deflection system.

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Computation of the Relative Sensitivity of a Deflection System  
With Travelling Waves

flected wave, and on the assumption that electromagnetic wave dispersion is absent in the band of frequencies to be registered. A complex plane is used for visual representation of the process of interaction between the electron beam and the travelling wave field (Figure 2). The results of computations for an experimental tube with stated parameters are introduced by way of example. Checking of the formulae used was done with an experimental prototype travelling-wave tube produced by the Moscow Energetics Institute in 1953, using VHF frequencies. The influence of the accelerating voltage on the sensitivity of the tube at a frequency of 3128 mc for computed and experimental conditions are shown in the graph of figure 4. This article was recommended by the Kafedra teoreticheskikh osnov elektrotehniki Moskovskogo

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SOV/142-58-6-13/20

Computation of the Relative Sensitivity of a Deflection System  
With Travelling Waves

ordena Lenina energeticheskogo instituta (Chair of the Theoretical Bases of Electrical Engineering of the Moscow Order of Lenin Power Institute). There are 2 diagrams, 2 graphs, and 16 references, 5 of which are Soviet, 8 English, 1 German, and 2 French.

SUBMITTED: June 16, 1958

Card 4/4

SHAMAYEV, Yu.M., dotsent, kand.tekhn.nauk; LISITSYN, G.F., kand.tekhn.  
nauk; MEL'NIKOV, E.A., inzh.; OVCHINNIKOV, V.M., inzh.  
SKUCHAROV, V.V., kand.tekhn.nauk; TITOV, D.G., inzh.

Developing and testing the method of automatic object adjustment  
of the width of the line on the screen for electron-beam tubes.  
Trudy MEI no.27:267-280 '58. (MIRA 13:4)  
(Cathode ray tubes)



В. А. Гребенко,  
Б. Н. Ковалев,  
В. М. Лобачев,  
А. Г. Филатов,  
Ю. Н. Фест.

Комплекс полупроводниковых элементов и узлов цифровой вычислительной машины

10 июня  
(с 18 до 22 часов)

А. А. Косарев

Методы расчета устройств на ферритных сердечниках

Ю. М. Шенков

Методы расчета индуктивных элементов, содержащих ферромагнитные сердечники с произвольной формой магнитопровода

Н. В. Корольков

Быстродействующие магнитные элементы арсенала

А. А. Гевор

О расчете цепи на безындуктивных элементах

64

11 июня  
(с 10 до 16 часов)

Л. М. Замоскатов

Счетчики на ферритно-транзисторных элементах

В. А. Мещин

Применение однополюсных ферритовых релаксаторов в цепях индуктивных элементов

Н. В. Корольков

Магнитный ферритовый индуктор для логических элементов

С. М. Зайцев

В. А. Вайнштейн

Триггерный индуктивный элемент системы счета для цифровой машины на ферритах

11 июня  
(с 18 до 22 часов)

В. М. Шенков

Защитные цепи для цифровой машины с индуктивными элементами

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report submitted for the Centennial Meeting of the Scientific Technological Society of  
Radio Engineering and Electrical Communications in A. S. Popov (VSEK), Moscow,  
8-12 June, 1959

SHAMAYEV, Yu. M.  
~~28(1)~~ 16.6800

SOV/161-59-1-2/25

AUTHORS: Belyavskiy, Valeriy Fedorovich, Aspirant,  
Shamayev, Yuriy Matveyevich, Docent, Candidate of Technical  
Sciences

TITLE: Using the Equations of Dynamic State of Ferromagnetic Cores  
With Rectangular Hysteresis Loop for the Computation of Impulse  
Operated Circuits

PERIODICAL: Nauchnyye doklady vysshey shkoly. Elektromekhanika i avtomatika,  
1959, Nr 1, pp 6-22 (USSR)

ABSTRACT: A method for the computation of circuits with ferromagnetic  
cores with rectangular hysteresis loop is presented here. This  
method is based on the use of equations for the dynamic state  
(Refs 1-4). The computation of a very simple loop coupler,  
which passes on the information from one core to the other,  
is carried out at first. The formulas (25) and (26) are derived,  
and the special cases for the use of these formulas are shown  
by three examples. These formulas are only valid for an entire  
and simultaneous magnetic reversal of the cores, and lose their  
validity as soon as the cores are magnetically reversed in  
part only. The computation of circuits with a number of ferro-  
magnetic cores - the circuits being intended for the multi-

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SOV/161-59-1-4/25

~~24(3)~~ 16.6800

AUTHORS: Shamayev, Yuriy Matveyevich, Candidate of Technical Sciences,  
Docent, Dyatlov, V. L., Pirogov, Arkadiy Ivanovich,  
Junior Scientific Worker

TITLE: Dynamic Characteristics of Ferrites

PERIODICAL: Nauchnyye doklady vysshey shkoly. Elektromekhanika i avtomatika,  
1959, Nr 1, pp 27-34 (USSR)

ABSTRACT: The properties of ferromagnetic materials during a magnetic reversal by impulses are investigated here. On the basis of the papers (Refs 3, 2, 5, 6, 7, 8, 1), formula (7) is derived for these properties. The correctness of formula (7) for quite different methods of magnetic reversal in ferrite was investigated experimentally. The experimental results for 3 ferrites of the brands BT-2, K-28 and K-132 are shown. The experimental data correspond to those computed for  $r(B)$ . The function  $H_o(B)$  does not quite correspond with the static boundary-hysteresis loop  $H_{cm}(B)$ . Formula (12) for the process of magnetic reversal is written down, this formula expressing the process better than (7). B - induction, H - field, r - a certain coefficient. The reversal coefficient and the

Card 1/2

24(3)

AUTHOR:

Shamayev, Yu. M.

SOV/48-23-3-31/34

TITLE:

Equivalent Circuits and the Dynamic Characteristics of Ferrites (Skhemy zameshcheniya i dinamicheskiye kharakteristiki ferritov)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 3, p 420 (USSR)

ABSTRACT:

As various investigations showed (Ref 1), it is possible to describe dynamic ferrite characteristics by the equation  $f(B, H, dB/dt...) = 0$  which connects B and H with its derivations. The hypersurfaces in the phase space (Ref 1) are the geometrical representation of this connection. At the same time it is possible to compare this equation with one or more electric circuits which represent the equivalent circuit of the ferrite. Thus, the dynamic characteristics may be represented by the surface, equation and equivalent circuit. The representation of the characteristics in form of a surface is very demonstrative and permits graphoanalytical calculations. In connection with the consideration of electric circuits the application of the equivalent circuit is the most convenient. In the case of a pulse-like magnetic reversal the coupling

Card 1/2

24(3)

AUTHORS:

Shamayev, Yu. M., Lisitsyn, G. F.,  
Pirogov, A. I.

SOV/48-23-3-32/34

TITLE:

On the Problem of Dynamic Characteristics of Ferrites (K  
voprosu o dinamicheskikh kharakteristikakh ferritov)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959,  
Vol 23, Nr 3, pp 420-423 (USSR)

ABSTRACT:

The analysis of various experimental data shows that the dynamics of the magnetic reversal of ferromagnetics is in each case characterized by a loop  $B(H)$ . The loop  $B(H_{st})$  does not exert any direct determining effect upon dynamics. The experimental results show that the characteristics  $B(H)$  vary greatly under different conditions of magnetic reversal. Similar results are obtained also in the investigation of the sinusoidal field: The characteristics differ in the case of the same amplitude and different frequency and in the case of the same frequency and different amplitude. Dynamic characteristics of ferrites were investigated by means of a device with a generator for current pulses and with two indicators. A large number of different ferrites was investigated by means

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On the Problem of Dynamic Characteristics of Ferrites SOV/48-25-3-32/34

of this device (VT-1, VT-2, VT-4, K-series, etc). It was found that the most essential dependences of different ferrites have a similar form. Figures 1a and 1b show the oscillograms of current pulses taken on the controlling resistor, and the voltages on the measuring coiling. As may be seen, the magnetic reversal can take place in a longer (Fig 1a) or shorter (Fig 1b) period of time than the time of ascent of the current pulses ( $\tau_{fr}$ ). Pulse characteristics  $1/\tau = f(H)$  were taken for

various ferrites at different constant values of the duration of ascent of the pulse of the field reversing the magnetism. The duration of magnetic reversal  $\tau$  was determined according to the voltage in the ferrite coiling in a height of  $0.1 U_m$

with respect to the voltage pulse. The characteristics found are well approximated in a wide range of field variations by the formula  $(H - H_0)\tau = S_w$ . Figure 2 shows the dependence  $\tau_{fr}/\tau = f(H_m/H_{kr})$  which was taken at different amplitudes and the duration of magnification in diameter of the external field ( $\tau_{fr}$  - duration of the pulse front,  $\tau$  - duration of

Card 2/3

On the Problem of Dynamic Characteristics of Ferrites SOV/48-23-3-32/34

magnetic reversal,  $H_m$  - amplitude of the external field,  $H_{kr}$  - the critical value of the amplitude of the external field if  $\tau_{fr} = \tau$ ). It is possible to draw three different conclusions from figure 2: 1) There is a similarity between the processes of magnetic reversal of pulses. 2) The slowing down of the magnetic reversal is connected with the possibilities of the experimental device. 3) It is convenient to determine  $S_w$  and  $H_o$  from the formula  $(H_m - H_o)\tau = S_w$  at  $\tau > \tau_{fr}$ , i.e. on the linear part of the curve  $1/\tau = f(H_m)$ . It is also possible to obtain this curve analytically from the dynamic characteristic of the ferrite which takes into account the binding  $B$  and  $H$  with at least one derivation  $dB/dt$ . There are 2 figures and 2 Soviet references.

Card 3/3

LOMONOSOV, Vsevolod Yur'yevich; POLIVANOV, Konstantin Mikhaylovich;  
Prinimali uchastiye: SHAMAYEV, Yu.M.; VITKOV, M.G.; POLIVANOV,  
Konstantin Mikhaylovich. ANTIK, I.V., red.; BORUNOV, N.I.,  
tekhn.red.

[Electrical engineering; basic concepts] Elektrotehnika;  
osnovnye poniatiia. Izd.9., perer. Moskva, Gos.energ.izd-vo,  
1960. 391 p. (MIRA 13:9)

(Electric engineering)



82770

S/103/60/021/008/010/014

B012/B063

AUTHORS: Belyavskiy, V. F., Shamayev, Yu. M. (Moscow)

TITLE: Calculation of Electric Circuits With Cores of Rectangular Hysteresis Loops

PERIODICAL: Avtomatika i telemekhanika, 1960, Vol. 21, No. 8, pp. 1188-1197

TEXT: On the basis of experimental and theoretical investigations of the dynamic magnetic reversal of ferritic cores with right-angled hysteresis loops, the laboratory of the kafedra teoreticheskikh osnov elektrotekhniki MEI (Chair of Theoretical Fundamentals of Electrical Engineering of MEI) obtained formula (1) (Refs. 1-3) which determines the behavior of the ferrite in any magnetic reversal. Here, this formula is given as a differential equation (3) and integral equation (4), respectively. Two problems are studied: 1) Calculation of the transient in a circuit with a toroidal ferritic core and known parameters. 2) Determination of the parameters of a circuit with several ferritic cores. The two problems are

Card 1/2

30519

S/194/61/000/008/078/092

D201/D304

24.2200 (1147, 1144, 1164)

AUTHORS: Orin, I.A., Lisitsyn, G.F. and Shamayev, Yu.M.

TITLE: Surface effect in a rectangular hysteresis loop  
ferrite membrane

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 3, 1961, 53, abstract 8 1342 (V sb. Ferrity.  
Fiz. i fiz.-khim. svoystva, Minsk, AN BSSR, 1960,  
377-385)

TEXT: The surface effect has been evaluated in a thin  
ferrite membrane with and without the effect of magnetic viscosity.  
If the viscosity is absent it is assumed that the process of mag-  
netic polarity reversal of material layers occurs instantaneously  
as soon as the intensity of the reversed magnetic field reaches the  
value  $H_c$  inside the layer. The equation has been derived for this  
case of the inter-domain boundary displacement. For actual ferrites,  
the time  $\tau$  of the magnetic polarity reversal is of the order of

Card 1/2

PHASE I BOOK EXPLANATION

SOV/4893

Vsesoyuznaya sovetskaniye po fizike, fiziko-khimiya i fiziko-matematicheskim naukam  
ferritov i fizicheskimi osnovam ikh prikladnogo. 34, Minsk, 1959  
Perrity; fizicheskiye i fiziko-khimiya nauki. Doklady  
(Perrites; Physical and Physicochemical Properties. Reports)  
Minsk, Izd-vo AN BSSR, 1960. 655 p. Errata slip inserted.  
4,000 copies printed.

Sponsoring Agencies: Nauchnyy sovet po magnetizmu AN SSSR. Otdel  
fiziki tverdogo tela i poluprovodnikov AN BSSR.

Editorial Board: Resp. Ed.: N. N. Sirota, Academician of the  
Academy of Sciences USSR; K. P. Belov, Professor; I. Kondor-  
skiy, Professor; K. M. Polivanov, Professor; R. T. Fiksin, Pro-  
fessor; G. A. Smolenskiy, Professor; N. N. Sholomitskiy, Candidate of  
Physical and Mathematical Sciences; E. M. Solov'yevskiy, and  
L. A. Bashkurov; Ed. of Publishing House: S. Kholyavskiy; Tech.  
Ed.: I. Volokhanovich.

PURPOSE: This book is intended for physicists, physical chemists,  
radio electronics engineers, and technical personnel engaged in  
the production and use of ferromagnetic materials. It may also  
be used by students in advanced courses in radio electronics,  
physics, and physical chemistry.

COVERAGE: The book contains reports presented at the Third All-  
Union Conference on Ferrites held in Minsk, Belorussian SSR.  
The reports deal with the properties of ferrites, electrical and  
magnetic properties of ferrites, studies of the growth  
of ferrite single crystals, problems in the chemical and physico-  
chemical analysis of ferrites, studies of ferrites having  
rectangular hysteresis loops and multicomponent ferrite systems  
exhibiting spontaneous rectangularity, problems in magnetic  
attraction, highly coercive ferrites, magnetic spectroscopy, of  
ferromagnetic resonance, magneto-optics, physical principles of  
using ferrite components in electrical circuits, anisotropy of  
electrical and magnetic properties, etc. The Committee on Mag-  
netism, AS USSR (S. V. Vonsovskiy, Chairman) organized the con-  
ference. References accompany individual articles.

Perrites (Cont.)	SOV/4893
Soboleva, L. P., and Ya. M. Kolli. Dynamics of the Re- versal of Magnetization of a Ferrite Bar With a Rectangular Cross Section	364
Brin, I. A., G. P. Lisitsyn, and Yu. M. Sharyay. The Surface Effect in a Ferrite Plate With Rectangular Hysteresis Loop	377
Sharyay, Yu. M. Stability of Particular Cycles and Accommodation During Reversal of Magnetization of Ferrites With Rectangular Hysteresis Loop	386
Sharyay, Yu. M., A. I. Pirogov, and V. P. Belyavskiy. Reversal of Magnetization of Ferrites With Rec- tangular Hysteresis Loop	391
Rabkin, L. I., and B. Sh. Epstein. Ferrites With Rec- tangular Hysteresis Loop in Weak Fields	401

Card 12/18

Card 4/18



PHASE I BOOK REPRODUCTION SOV/4893

Vsesoyuznoye sovetskoye nauchnoye i tekhnicheskoye izdatel'stvo fiziko-khimicheskikh svoystvam ferritov i fizicheskikh osnovaniy ikh primeneniya. 3d, Minsk, 1963  
 Ferrity: fizicheskiye i fiziko-khimicheskkiye svoystva. Doklady (Reports); Physical and Physicochemical Properties. Reports) Minsk: Izd-vo AN BSSR, 1960. 695 p. Errata slip inserted. 4,000 copies printed.

Sponsoring Agencies: Nauchnyy sovet po magnetizmu AN SSSR. Otdel fiziki tverdogo tela i poluprovodnikov AN BSSR.

Editorial Board: Resp. Ed.: M. N. Gurova, Academician of the Academy of Sciences BSSR; K. P. Kulov, Professor; Ye. I. Kondorakiy, Professor; K. M. Polubinskiy, Professor; B. V. Telesnin, Professor; G. A. Semakova, Professor; N. M. Shtol'ts, Candidate of Physical and Mathematical Sciences; Z. M. Sashchenko; and L. A. Bunkin; and L. A. Bunkin, Editor of Publishing House: S. Kholyavskiy; Tech. Ed.: I. Voloshinovich.

PURPOSE: This book is intended for physicists, physical chemists, radio electronics engineers, and technicians working in the production and use of ferrimagnetic materials. It may also be used by students in advanced courses in radio electronics, physics, and physical chemistry.

COVERAGE: The book contains reports presented at the Third All-Union Conference on Ferrites held in Minsk, Belorussian SSR. The reports deal with magnetic transformations, electrical and galvanomagnetic properties of ferrites, studies of the growth of ferrite single crystals, problems in the chemical and physicochemical analysis of ferrites, studies of ferrites having tetragonal, rectangular hysteresis loops and multicomponent ferrimagnetic exhibiting spontaneous rectangularity, properties of ferrites in the attraction, highly sensitive ferrite magnetic field sensors, ferromagnetic resonance, in optical properties, anisotropy of using ferrite materials in electrical circuits, etc. The Committee on Magnetism of the USSR (Z. V. Vainovskiy, Chairman) organized the conference. References accompany individual articles.

Ferrites (Cont.) SOV/4893  
 Mikhaylovskiy, L. A. Cross Modulation in a Ferrite 587  
 Dubosarskiy, V. Yu., A. A. Manuylova, and S. P. Stanishcheva. Investigation of Magnesium-Chromium Ferrites in the Decimetric Wave Range 591  
 Fabrikov, V. A. The Theory of Ferrite Dielectric Delay Lines With Distributed Constants 596  
 Shvarts, A. A. Magnetostatic Cures from Ferric Oxides 607  
 Shumakov, V. A. Calculation of Transient Processes in Ferrite Circuits of Nonlinear Inductors and Transformers With Ferrite Cores Which Have Rectangular Hysteresis Loops 617  
 Belyavskiy, V. P., and Yu. A. Shumakov. Calculation of Constant Conditions in Multilayered Ferrites Containing Rectangular Hysteresis Loops 623

Card 17/18

Card 4/8

30653

S/105/61/000/011/001/002  
E140/E563

9.3230 (1013, 1147, 1121)

AUTHORS: Bogolyubov, V. Ye. Doctor of Technical Sciences,  
Shamayev, Yu. M. Candidate of Technical Sciences and  
Loginov, M. N. Engineer

TITLE: Transient processes in reactive networks containing  
transformers with square-loop ferrites

PERIODICAL: Elektrichestvo, no. 11, 1961, 60-64

TEXT: The transient processes in reactive networks containing  
transformers with square-loop ferrites are solved taking into  
account the change of the dynamic hysteresis curve as a function of  
the rate of change of magnetization. The problem is solved by  
introducing the surface defined by

$$(H - H_0) = g(B) \frac{dB}{dt} \quad (1)$$

where  $H$  is the external field intensity,  $2H_0$  is the width of the  
idealized rectangular static hysteresis loop,  $g(B)$  is the experi-  
mentally determined specific dynamic conductance and  $dB/dt$  is  
the rate of variation of magnetic induction in the core. On the  
basis of known approximations to the experimental curves, an  
card 1/2

32027

S/105/62/000/007/001/004

E200/E135

9. 7/50

AUTHORS: Bogolyubov, V.E., Doctor of Technical Sciences;  
Shamayev, Yu.M., Candidate of Technical Sciences; and  
Frolov, L.B., Engineer

TITLE: Analysis of the operation of a single-pulse shift-  
register taking into account the nonlinearity of the  
ferromagnetic material

PERIODICAL: Elektrichestvo, no.7, 1962, 1-5

TEXT: Guidelines are given on the selection of component  
parameters for a single-pulse magnetic-core shift-register with a  
capacitive delay in the loop; the nonlinear behaviour of the  
ferrite is taken into account. Starting from the empirical  
equation for the magnetization impulse

$$Q(B) = \int_0^t (H - H_0) dt$$

expressed by Yu.M. Shamayev et al (Izv.AN SSSR, seriya fizich.,  
v.23, no.3, 1959) as:

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Analysis of the operation of a ..... <sup>39027</sup>  
S/105/62/000/007/001/004  
E200/E135

where:  $S$  is the cross-sectional area of the core;  $l$  is the length of the core;  $u_C$  is the voltage across the capacitor;  $w_1$  and  $w_2$  are the number of turns in the input and output windings respectively;  $B_r$  is the residual induction. Calculations show that the resistance  $R$  has a great effect both upon the process of charging the capacitor and the remagnetization. At large values of  $R$  remagnetization does not occur at all. Consequently  $R$  should not exceed the upper limit found from inequality (11). It should not be very small, since then the voltage  $u_{C_{max}}$  decreases sharply and, at very low values of  $R$

and small capacitances, remagnetization again fails to occur. In the illustrative case considered the size of the resistance  $R$  does not affect greatly the mode of operation while it remains between the limits of 100 - 300 ohms. Within these limits it is possible to select the actual value of  $R$  from other considerations (minimal power loss, noise stability, etc). The size of the capacitor has the greatest effect upon the speed of operation of the register and from this viewpoint the capacitance should be

Card 3/5



Analysis of the operation of a ....

39027  
S/105/62/000/007/001/004  
E200/E135

chosen as small as possible. However, a reduction of  $C$  will lead to a lowering of the stability of the remagnetization, as can be seen from inequalities (24) and (25). To obtain the maximum stability one should select the value of the capacitance by taking these conditions into consideration, yet without exceeding the bounds of inequality (11). Relation (12) shows that  $w_2$  should exceed  $w_1$ . As  $w_1$  increases, at first the stability of operation of the register is improved, and then the effect of  $w_1$  upon the stability is reduced. The influence of the number of turns  $w_2$  is indirect; expressing itself through the voltage  $u_{C_m}$ . To obtain the highest possible value of  $u_{C_m}$  one should take neither very low nor very high values of  $w_2$ . Optimal  $w_2$  lies close to the value determined by Eq.(12). As  $H_m$  increases the maximal voltage on the capacitor increases and, consequently, the reliability of operation of the register is improved. At the same time the operating speed of the shift-register is increased but the power requirements are raised. There are 4 figures and 2 tables.

Card 4/5

PIROGOV, Arkadiy Ivanovich; SEMAYEV, Yuriy Matveyevich;  
PASHUKANIS, F.Ye., kand. tekhn.nauk, dots.

[Magnetic cores with rectangular hysteresis loops; static and dynamic characteristics, methods for measurement and control, and principles of designing networks with cores having rectangular hysteresis loops] Magnitnye serdechniki s pryamougol'noi petlei gisterezisa; staticheskie i dinamicheskie kharakteristiki, metodika izmerenii i kontrolya, osnovy rascheta tspey, sodержashchikh serdechniki s PPG. Moskva, Izd-vo "Energiia," 1964. 175 p. (MIRA 17:9)

KOPORSKIY, A.S. (Moskva); PIROGOV, A.I. (Moskva); SHAMAYEV, Yu.M. (Moskva)

Dynamic characteristics of magnetic cores with rectangular  
hysteresis loop and their analytical description. Avtom. i telem.  
25 no.10:1502-1510 O '64. (MIRA 17:12)

L 45780-66 ENT(a)/EP(1) LIP(c) GH/BE

ACC NR: AR6016023

SOURCE CODE: UR/0271/66/000/001/B027/B028

AUTHOR: Brin, I. A.; Shamayev, Yu. M.

TITLE: Transmission of binary information over a shift register <sup>16c</sup>

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn., Abs. 1B193

REF SOURCE: Tr. Mosk. energ. in-ta, vyp. 60, ch. I, 1965, 31-47

TOPIC TAGS: binary information, shift register

ABSTRACT: The concept of an element characteristic which fully determines all the characteristics of the circuit, i. e. module characteristics resulting from an analysis of the transmission characteristics of individual elements, is introduced. These characteristics make it possible to determine all the characteristics of the shift register which use these modules. The characteristic of an element determines the probability of converting an input signal value to an output signal observing the spread of transmission characteristics of individual elements. Differential equations are derived for determining the probability of converting the arbitrary value of an input signal into a zero or unit signal, or the effective length of the circuit. A method of solving the equations and numerical examples is given. Orig. art. has: 1 illustration and 5 tables. [Translation of abstract] [DW]

SUB CODE: 09/

Card 1/1

UDC: 681.142.642.7

1 47/53-2 (10/20/77) (10/20/77) (10/20/77)  
ACC NR: ARG016013 SOURCE CODE: UR/0271/66/000/001/A009/A009

AUTHOR: Kuznetsov, A. I.; Shamayev, Yu. M.

TITLE: Analysis and synthesis of circuits containing magnetic cores with a rectangular hysteresis loop and reactive elements

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl., tekhn., Abs. 1A54

REF SOURCE: Tr. Mosk. energ. in-ta. vyp. 60, ch. I. 1965, 63-82

TOPIC TAGS: magnetic core, hysteresis loop, capacitor

ABSTRACT: Rectangular hysteresis loop cores are generally used for storage of information while reactive elements (capacitors, inductors) are connected to the loop couplers between the cores and used for the delay of signals. Processes occurring in the circuit during charge of capacitance through the resistor and core winding and during core magnetic reversal from the capacitance discharged through the resistor are studied. It is demonstrated that in this circuit processes are characterized by nonlinear differential equations which can be quite accurately

Card 1/2

UDC: 62-523:681.142.672

L 47126-66 ENT(d)/EMP(1) IJP(c) BB/GG

ACC NR: AR6016011 SOURCE CODE: UR/0271/66/000/001/A009/A009

AUTHOR: Zakhodyaychenko, V. I.; Shamayev, Yu. M.

33

B

TITLE: Two trends in designing diodeless magnetic elements using ring cores <sup>166</sup>

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn., Abs. 1A52

REF SOURCE: Tr. Mosk. energ. in-ta, vyp. 60, ch. I, 1965, 83-96

TOPIC TAGS: magnetic element, magnetic core, logic circuit, diodeless magnetic element

ABSTRACT: The implementation of a new trend in the development of magnetic logic, i. e., the designing of logical circuits which utilize only a core and connecting wires, is noted. To this end, use is made of complex-shaped cores providing the decoupling of the input and output circuits of magnetic cells. More widely used are cells with cores and two or three apertures. Design variants of diodeless circuits using conventional ring circuits are reviewed. They are

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UDC: 62-523:681.142.672

L 47120-66 ENT(d)/EMP(1) IJP(c) BB/00

ACC NR: AR6016025

SOURCE CODE: UR/0271/66/000/001/B031/B031'

AUTHOR: Pirogov, A. I. ; Shamayev, Yu. M.

33  
B

TITLE: Magnetic cores<sup>66</sup> with a rectangular static characteristic for storage and logic circuits

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn., Abs. 1B222

REF SOURCE: Tr. Mosk. energ. in-ta, vyp. 60, ch. 2, 1965, 13-50

TOPIC TAGS: logic circuit, magnetic core, storage circuit

ABSTRACT: The requirements are given for magnetic cores with a rectangular hysteresis loop for use in storage and logic circuits. Static characteristics and parameters of magnetic cores are determined, which, it is pointed out, represent all magnetic-core properties. The general nonlinear differential equation for the dynamic state of a magnetic material with a rectangular hysteresis loop in the process of switching is analyzed. Conclusions are made on the basis of an

Card 1/2

UDC: 681.142.67.621.385

ACC NR: AR6016025

analysis of static and dynamic characteristics of Soviet magnetic cores, making it possible to determine the value of various characteristics both under normal conditions and with temperature variations. Methods of production control for magnetic cores based on voltage pulses under specific switching conditions, are described. A block diagram of a system for magnetic-core control by a standard and a differential method is given. Static and dynamic parameters of magnetic cores with a rectangular hysteresis loop are presented. Orig. art. has: 14 illustrations and a bibliography of 27 titles. [Translation of abstract] [DW]

SUB CODE: 09/

Card 2/2



L 59563-65 EWT(d)/EED-2/EWP(1) Pq-l/Pg-l/Pk-l IJP(c) BB/GG

ACCESSION NR: AP5013842

UR/0103/65/026/005/0866/0875  
62-502

26  
B

AUTHOR: Brin, I. A. (Moscow); Shamayev, Yu. M. (Moscow)

TITLE: Transmission of binary information through a shift register

16C

SOURCE: Avtomatika i telemekhanika, v. 26, no. 5, 1965, 866-875

TOPIC TAGS: shift register, binary information

ABSTRACT: The shift register is regarded as a chain of series-connected structural components, or "links". A concept of "link characteristic" is introduced, which determines the probability of conversion of input signal into output signal, with an allowance for random spread of characteristics of individual links. The transfer characteristics of the shift register are found on the basis of link characteristics. Integral equations are set up for determining the probability of conversion of an arbitrary input into 0 or 1 signal, determining the effective chain length, etc. The shift register usually contains 10 or more links. To ensure the conversion of input into 0 or 1, only two absorbing zones are necessary and sufficient. The characteristics of the chain can be obtained by solving linear algebraic equations 18-22, whose coefficients are determined by the link-

Card 1/2

L 59563-65

ACCESSION NR: AP5013842

characteristic matrix. Shifting the link characteristic to the right or to the left enhances the probability of signal restoration or noise immunity, respectively. The "wider" is the link characteristic ( $\beta - \alpha$ ), the longer should be the chain shaping 0 or 1 signal. Orig. art. has: 1 figure, 38 formulas, and 5 tables.

ASSOCIATION: None

SUBMITTED: 08May64

ENCL: 00

SUB CODE: DP

NO REF SOV: 000

OTHER: 000

Card 2/2

L 61630-65 EWT(d)/EED-2/EWP(1) Pq-4/Pg-4/Pk-4 LJP(c) BB/GG/GS  
 ACCESSION NR: AT5014708 UR/0000/65/000/000/0028/0037

25  
 B+1

AUTHOR: Shamayev, Yu. M.

TITLE: Core characteristics during partial cycling in hyperoperative memories

SOURCE: Operativnyye i postoyannyye zapominayushchiye ustroystva (Rapid and nonvolatile storage); sbornik statey. Leningrad, Izd-vo Energiya, 1965, 28-37

TOPIC TAGS: partial switching core operation, ultrafast magnetic memory, computer speed improvement, auxiliary memory

16C

ABSTRACT: An increase in speed in digital computers may be achieved by perfecting the logical structure and the engineering solution of the various computer elements. One approach to the simultaneous solution of both problems lies in the development of an auxiliary, ultrafast, low-capacity magnetic memory of cores with rectangular hysteresis loop working with partial cycles (partial switching). The optimum solution of the engineering part of the problem requires a careful theoretical and experimental analysis of core operation during partial switching. Consequently, the author presents a detailed theoretical analysis of the problem and supplies the equations needed for engineering de-

Card 1/2

L 61630-65

ACCESSION NR: AT5014708

sign. Orig. art. has: 33 formulas and 3 figures.

ASSOCIATION: None

SUBMITTED: 20Jan65

ENCL: 00

SUB CODE: DP

NO REF SOV: 004

OTHER: 000

Card

121  
2/2

SHAPIROV, V. M.

Magnetic storage and logical elements of digital devices.  
Trudy MI no. 60 pt. 1:17-30 '65.

Design and analysis of magnetic-semiconductor switching  
circuits. Ibid.:49-62 (MIPA 19:1)

Phil, I.A.; SHINAEV, Yu.N.

Transmission of binary data through a shift register  
consisting of identical continuous random links. Trudy  
ISI no.60 pt.1:31-48 '65. (MIRA 19:1)

KUZIETSOV, A.I.; SHARAYEV, Ye.M.

Analysis and synthesis of networks containing magnetic cores  
with rectangular hysteresis loops and reactive elements.

Trudy IEI no.60 pt.1:63-82 '65.

(MIRA 19:1)

ЗАТХОДЫНОВСКИЙ, В.И.; ШАХАТОВ, Ю.М.

Two trends in the construction of diodeless magnetic elements  
using ring cores. Trudy IRI no.60 pt.1:83-96 '65.

(MIRA 19:1)



L 47125-66 EMT(d)/EMP(L) LJP(c) BB/CG

ACC NR: AR6016012

SOURCE CODE: UR/0271/66/000/001/A009/A009

INVENTOR: Nemtsov, M. V.; Shamayev, Yu. M.

60  
B

TITLE: Investigation of the switching processes of rectangular hysteresis loop ring cores in weak magnetic fields

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn., Abs. 1A53

REF SOURCE: Tr. Mosk. energ. in-ta, vyp. 60, ch. 2, 1965, 87-99

TOPIC TAGS: magnetic core, hysteresis loop, magnetic permeability, magnetic viscosity, ring core, miniature core

ABSTRACT: A description is given of methods developed for investigating pulse magnetic reversal of miniature cores with a rectangular hysteresis loop in magnetic fields corresponding to the ascending sector of the full hysteresis loop. A pulse program providing for magnetic reversal along the limit cycle acts upon the core. In weak fields the viscosity processes in magnesium-manganese ferrites strongly depend on temperature. Maximum viscosity coincides with maximum permeability and is attained in the intensity region corresponding to the initiation of magnetization. The design of the measuring system is described and schematic diagrams of some of its individual units (key using type-P407 transistor, phantastron delay line) are presented. Orig. art. has: 10 illustrations and a bibliography of 4 titles. N. P. Translation of abstract

[DW]

SUB CODE: 09/

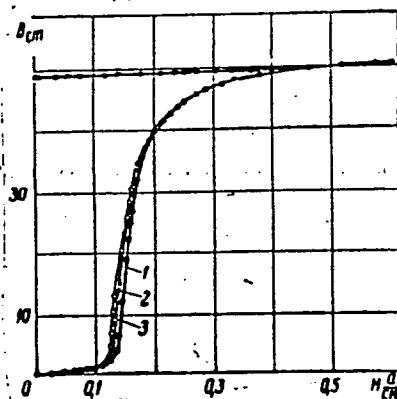
Card 1/1

UDC: 62-523:681.142.672+621.318:565

ACC NR: AT6028989

$f = 50, 100, \text{ and } 500 \text{ cycles}$ . The "static" characteristic of a K-222 core is shown on Fig. 1.

Fig. 1. Dynamic characteristic of ferrite ( $3 \times 2 \times 1.5 \text{ mm}$ ), obtained by the pulse method at various frequencies: 1 - 500 cycles, 2 - 100 cycles, 3 - 50 cycles ( $T = 290\text{K}$ )



Maximum errors in the induction measurement do not exceed  $\pm 10\%$ . Orig. art. has: 4 figures and 2 formulas.

SUB CODE: 09, 20/ SUBM DATE: 22Dec65/ ORIG REF: 001

Card 2/2

ALKSEYENKO, P.A.; SHAMAYEVA, A.M., agronom-entomolog

In the Tatar A.S.S.R. Zashch. rast. ot vred. i bol. 5 no. 133-34  
Ja '60. (MIRA 14:6)  
(Tatar A.S.S.R.—Field crops—Diseases and pests)

SHUL'YAT'YEV, I.I.; SHAMAYEVA, A.M., inzh.

New method of covering the taker-in with Garnett wire. Tekst.  
prom. 21 no.6:36-37 Je '61. (MIRA 15:2)

1. Nachal'nik tsentral'noy laboratorii ramenskogo kombinata "Krasnoye znanya" (for Shul'yat'yev).
2. TSentral'naya laboratoriya ramenskogo kombinata "Krasnoye znanya" (for Shamayeva)  
(Carding machines)

MULLIN, S. V.; SHAMAYEVA, A. M., agronom

In Tatarstan. Zashch. rast. ot vred. i bol. 6 no.6:58 Je '61.  
(MIRA 16:4)

(Tatar A.S.S.R.—Plants, Protection of)

SHAMAYEVA, A.M., agronom sluzhby ucheta i prognozov

Advantages of plant protection in Tatarstan. Zashch. rast. ot  
vred. i bol. 6 no.9:11-12 S '61. (MIRA 16:5)  
(Tatar A.S.S.R.--Plants, Protection of)

18(5,7)  
AUTHORS:

SOV/135-59-8-11/24  
Tokmakov, V.S., Engineer and Shamayeva, G.G., Candidate of Technical Sciences

TITLE:

The Use of Visual X-Ray Control in Welding Joints

PERIODICAL:

Svarochnoye proizvodstvo, 1959, Nr 8, pp 35-36 (USSR)

ABSTRACT:

The quality of welded joints is at the present time generally controlled with the photographic methods of X-ray and gamma-ray control by watching the photo of the welded seam in the X-ray film. Since this method is using up a lot of photographic materials, and since a long time is necessary to develop the film, the method can be applied only in spot checks. For a mass control of welded joints it would be desirable to replace the photographic method by a visual one in which the picture of the work piece appears on a fluorescent screen. The use of such screens in X-raying steel of a thickness up to 10 mm only permitted to detect flaws whose depth is larger than 8% of the total strength of the steel. The low sensibility of the visual method using X-ray screens finds its explanation in the fact

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SOV/135-59-8-11/24

# The Use of Visual X-Ray Control in Welding Joints

that they have a low illumination power. An increase in the luminosity of the screens may be achieved by considerably enlarging the capacity of the radiation, but this would complicate the Roentgen apparatus and increase the dangerousness of the work. The use of a television set in the X-raying process made the visual method completely undangerous, but the sensibility and depth of transillumination remained the same. The clearness of the picture can be improved considerably by using an electronic-optical transformer, which transforms the X-ray picture first into a light-optical one, then into an electronical one, and then back into a light-optical picture. The principle of the X-ray method with an electronic-optical transformer is shown in figure 1. The improvement in the clearness of the picture in the electronic-optical transformer in comparison to the clearness of the X-ray screen is achieved by enlarging the luminous flux from the initial screen and by the electronic-optical scaling down of the picture. The great improvement of

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The Use of Visual X-Ray Control in Welding Joints

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the picture caused by the transformer makes it possible to control the metal with X-ray installations of low capacity. Welding-seams of a thickness up to 10 mm were tested with a Roentgen set of type RUM-4 and a X-ray tube of type ZBDM-100 which is installed 800 mm from the welding seam. The electronic-optical transformer which was used was a product of the Philips company. In conclusion the author compares the sensibility of the visual and photographic methods. There are 3 graphs and 1 diagram.

ASSOCIATION: TsNIICHM (Tokmakov); GNIRRI (Shamayeva)

Card 3/3

S/070/62/007/003/018/026  
E132/E460

AUTHORS: Shamayeva, G.G., Artamonova, A.P.

TITLE: A visual X-ray method for orienting crystals of diamond

PERIODICAL: Kristallografiya, v.7, no.3, 1962, 454-456

TEXT: An electron-optical image converter, giving a brightness increase of about 1000 over a fluorescent screen, was used for orientating single crystals of diamond. An ordinary sealed-off X-ray tube was used and the goniometer head was adjusted by a mechanical remote-control cable. A screen to crystal distance of 116 mm was used. The peripheral X-ray spots on the screen are slightly distorted with respect to a photographic record. Crystals can be set in 2 to 3 minutes. There are 2 figures. ✓

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy rentgeno-radiologicheskiy institut (State Scientific Research X-ray-Radiological Institute)

SUBMITTED: September 19, 1961

Card 1/1

TYURYUKANOV, A.N.; SHAMAYEVA, G.M.

Iodine distribution in soils as related to their type and  
microrelief. Nauch.dokl.vys.shkoly; biol.nauki no.2:171-174  
'63. (MIRA 16:4)

1. Rekomendovana kafedroy pochvovedeniya Moskovskogo  
gosudarstvennogo universiteta im. M.V.Lomonosova.  
(SMOLENSK PROVINCE--SOILS--IODINE CONTENT)

TYURYUKANOV, A.N.; SHAMAYEVA, G.M.

Cartogram of the iodine content of soils in Kaluga Province and  
methods of its drawing. Nauch. dokl. vys. shkoly; biol. nauki  
no. 2:196-198 '64. (MIRA 17:5)

1. Rekomendovana kafedroy pochvovedeniya Moskovskogo gosudarstvennogo  
universiteta im. M.V.Lomonosova.

METEL'SKIY, V.; SHAMAYEVA, I.; SVIRIDOVICH, V.

Effectiveness of green fallows in Kemerovo Province. Zemledelie  
24 no.1:22-27 Ja '62. (MIRA 15:2)

1. Kemerovskaya oblastnaya gosudarstvennaya sel'skokhozyaystvennaya  
opytnaya stantsiya.  
(Kemerovo Province---Fallowing)

SHAMINA, O.G., seysmolog; VINOGRADOV, S.D., seysmolog; SILAYEVA, O.I.,  
seysmolog; BARLAS, V.Ya., seysmolog; SHAMAYEVA, L.A., seysmo-  
log; RIZNICHENKO, Yu.V., red.; PANTAYEVA, V.A., red.; RYBKINA,  
V.P., tekhn. red.

[Weak earthquakes] Slabye zemletriaseniia. Moskva, Izd-vo ino-  
str. lit-ry, 1961. 533 p. (MIRA 15:1)

1. Institut fiziki Zemli AN SSSR (for Shamina, Vinogradov,  
Silayeva, Barlas, Shamayeva).  
(Eaethquakes)

SHAMAYEVA, Ye. M.

SHAMAYEVA, Ye. M. - "Histophysiological Features of the Serous Membrane of the Stomach in Connection With the Processes of Circulation of Fluid in the Abdominal Cavity." Sub 26 Feb 62, Acad Med Sci USSR. (Dissertation for the Degree of Candidate in Medical Sciences).

SO: Vechernaya Moskva January-December 1962

SHEHAYEVA, Ye.M.; PANKOVA, S.S.

~~Effect of novocaine~~  
Effect of novocaine on antibody production (hemolysis and  
hemagglutinins). Zhur.mikrobiol.epid. i immu. 28 no.4:25-28  
Ap '57. (MLA 10:10)

1. Iz Instituta eksperimental'noy patologii i terapii ratskoy  
SSSR.

(NITROGEN MUSTARDS, eff.

N-bis(2-chloroethyl)-2-chloropropylamine on prod. of  
hemolysis & hemagglutinins)

(ANTIBODIES, eff. of drugs on  
same)



SHAMAYEVA, Ye.M., MAYOROVA, N.A., KHALEYEVA, T.G. (Moskva)

Effect of novoembichine on the course of the Arthus-Zakharov phenomenon and on anaphylactic shock [with summary in English].  
Pat.fiziol. i eksp.terap. 2 no.5:29-34 S-0 '58 (MIRA 11:12)

1. Iz laboratorii eksperimental'noy khimioterapii (zav. - chlen-korrespondent AMN SSSR prof. L.F. Larionov) Instituta eksperimental'noy patologii i terapii raka AMN SSSR.

(ALLERGY, exper.

anaphylactic shock & Arthus phenomenon, eff. of  
N-Bis (2-chloroethyl-2-propylamine hydrochloride (Bus))

(NITROGEN MUSTARD, eff.

N-bis (2-chloroethyl-2-propylamine hydrochloride,  
on exper. anaphylactic shock & Arthus phenomenon (Bus))

LARIONOV, I.F.; BUKHAROVA, I.K.; SHAMAYEVA, Ye.M.

Experimental study of the toxicity and the antineoplastic activity  
of the ethyl ester of acetylsarcosine-L-leucine. Vop. ork. 11  
no.4:78-80 '65. (MIRA 18:8)

1. Iz laboratorii eksperimental'noy khimioterapii (zav. - chlen-  
korrespondent AMN SSSR prof. I.F.Larionov) Instituta eksperimental'  
noy i klinicheskoy onkologii AMN SSSR (direktor - deystvitel'nyy  
chlen AMN SSSR prof. N.N.Blokhin).

SHAMBO, N. A., SHEFTAL, N. N., and KOKORISH, N. P.,

Institute of Crystallography, Acad. Sc., Moscow, -"Some Peculiarities in Crystallization of Silicium and Germanium Films and Silicium Single Crystals" (Section 14-8) a paper submitted at the General Assembly and International Congress of Crystallography, 10-19 Jul 57, Montreal, Canada.

C-3,800,189

137-58-4-6980

*SHAMBA, N. A.*

Translation from: Referativnyy zhurnal, Metallurgiya. 1958, Nr 4, p 95 (USSR)

AUTHORS: Mitrenin, B. P., Burdiashvili, Sh. S., Shamba, N. A., Volkov, V. P., Kovyrzin, V. K., Solov'yev, L. K.

TITLE: Obtaining Single Crystals of Silicon by Extraction From a Melt  
(Polucheniye monokristallov kremniya metodom vytyagivaniya iz rasplava)

PERIODICAL: V sb.: Vopr. metallurgii i fiz. poluprovodnikov, AN SSSR  
1957, pp 24-34

ABSTRACT: The possibility of obtaining large single crystals with a specified orientation from material purified by acid washing or obtained by reduction of  $\text{SiCl}_4$  by zinc, and the distribution of certain impurities in the extracted bar was investigated by the use of tagged atoms. The apparatus built employed high frequency heating of a base in which there was emplaced a quartz crucible containing the Si, or by means of a graphite resistance heater in the center of which, and on a quartz base, there was placed a graphite holder with the quartz crucible having the Si. A vacuum of  $10^{-4}$  mm Hg was maintained in the apparatus. The crucible was free to rotate at a speed of 1 rpm. and the seed in a direc-

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137-58-4-6980

## Obtaining Single Crystals of Silicon by Extraction From a Melt

tion opposite to that of the rotation of the crucible at a rate of 2 rpm. The rate of extraction was 0.5-1 mm/min. It was established that when a slag film existed at the surface of the melt it was not possible to obtain any single crystals, as a number of small crystals appeared at points of accumulation of slag and at the point of inoculation. Repeated extractions after careful etching and upon removal of visible slag inclusions on the surface of the bar by emery and cutting away of its ends made it possible to obtain single crystals of 15-20 mm diameter and lengths up to 240 mm. Before pulling the crystal, the melt was held for 15-20 min at the pulling temperature in order for equilibrium to be established. The opinion is offered that the polycrystallinity of a drawn bar is also due to the formation of a film of  $\text{SiO}_2$  when the vacuum is reduced below  $10^{-4}$  mm Hg, additional centers of crystallization being set up thereby. One of the possible causes of further increase in vacuum is the reaction of quartz and graphite, and therefore the crucibles in the apparatus employed were placed so that they would touch the bases only at three points. It was observed that vibration of the apparatus facilitated twinning in the single crystal being grown. Radioactive isotopes made it possible to determine that Sb and Ag (respectively 1.5 and 6.1 mg per 40 g Si) were completely distilled from the melt and were not to be found in the crystal. Ta (12.5 mg per 40 g Si) remained in its entirety in the zone, and was the last to solidify, while Fe

Card 2/3

137-58-4-6980

Obtaining Single Crystals of Silicon by Extraction From a Melt

(46.6 mg per 40 g Si) undergoes virtually uniform distribution through the bar in the process of extraction, the bulk of it remaining in the melt.

1. Single crystals--Production    2. Silicon tetrachloride--Reduction    I S.  
3. Zinc--Applications

Card 3/3

*Handwritten:* 70-3-20/20

AUTHOR: Shamba, N.A. and Sheftal, N.N.

70-3-20/20

TITLE: Spiral growth of silicon crystals (Spiral'nyy rost kristallov kremniya)

PERIODICAL: "Kristallografiya" (Crystallography), 1957,  
Vol.2, No.3, pp. 441 - 444 (U.S.S.R.)

ABSTRACT: This is a preliminary communication and the results are given relating to certain morphological features of the growth of silicon crystals. The authors established that in the growth of these crystals, the macro-size spiral formations play an important rôle. They found that large silicon acicules of 6 to 7 cm length represent a strongly-stretched spiral of pyramid cross-section. The experiments covered growth of crystals, growth of silicon crystals from the melt in a crucible, spiral growth of mono-crystals of silicon drawn out from a melt at a speed of 1 mm/min and spiral growth in the case of crystallisation from the gaseous phase. They found that even in the case of crystallisation from the gaseous phase, a macro-spiral form of growth of the crystals occurred.

Card 1/1 Acknowledgments are made to B.P. Mitrenin, V.I. Khachishvili and Dr.Ye.Ye. Rekser. There are 11 figures and photographs and 1 German references.

SUBMITTED: October 23, 1956.

AVAILABLE: Library of Congress

Negative Silicon Crystals

76008

SOV/10-4-5-30/36

a hexagon with an inscribed equilateral triangle, and all the faces became exposed. Still further etching expanded and moved the crystal faces deeper into the host crystal, but did not alter their forms. Among the faces, four (111) and three (100) were determined by X-ray methods. The (111) faces showed numerous steps separating incomplete atomic layers of roughly triangular outlines. The negative prisms were turned under  $30^{\circ}$  relative to the silicon prisms in which they grew. The vertices of the inscribed triangle at the bottom were in the middle of hexagon edges. As a whole, the negative crystals were similar to the host crystals. There are 4 figures; and 4 references, 2 Soviet, 1 German, 1 French.

SUBMITTED: January 4, 1959

Card 2/2



SHAMBA, N.A.

Some data on the forms of dissolution of silicon crystals. Kris-  
tallografiia 6 no.2:283 Mr-Ap '61. (MIRA 14:9)  
(Silicon crystals) (Solution (Chemistry))

34080

S/081/62/000/010/050/085

B168/B180

15.7000

AUTHOR:

Shamban, N. P.

TITLE:

Anticorrosion coatings on the basis of a chlorin skin

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 10, 1962, 365, abstract  
10I261 (Vestn. tekhn. i ekon. inform. N. 11. in-t  
tekhn.-ekon. issled. Gos. kom-ta Sov. Min. SSSR po khimii,  
no. 8, 1961, 50)

TEXT: A new method of protecting equipment against corrosion has been devised, i. e. by sticking a chlorin skin onto a metal surface and then impregnating with pervinyl chloride varnish. The skin is applied to a fresh layer of primer, enamel, pervinyl chloride lacquer or copolymers of polyvinyl chloride. It is resistant to dilute or concentrated acids HCl, H<sub>2</sub>SO<sub>4</sub>, HNO<sub>3</sub>, H<sub>2</sub>CrO<sub>4</sub>, H<sub>3</sub>PO<sub>4</sub>, HCOOH, alkalis, seawater and microorganisms. It is noted that the chlorin skin can be used as a protective intermediate layer between metal and lining of acidproof bricks or diabase tiles. The sequence in which the coatings are applied

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Anticorrosion coatings on....

S/081/62/000/010/050/085  
B168/B180

is described. [Abstracter's note: Complete translation.]

X

Card 2/2

ANTSUTA, Ye.B., arkhitekt.; KIRILLOV, N.P., arkhitekt.; KUZNETSOV, V.V., arkhitekt.;  
SLOTINTSEVA, M.N., arkhitekt.; PYATIN, S.G., inzh. Prinsipialni uchastikiye:  
CHUYENKO, R.G., arkhitekt.; MOSEVICH, Ya.Ya., arkhitekt.; GLAZKOV, F.I.,  
st. tekhnik; GOLUKHOV, G.I., inzh.; SAMSONOVA, T.T., inzh.; KOLESOVA,  
Ye.Ye., st. tekhnik; MAKAROVA, T.N., tekhnik; SHAMBAT, M.S., inzh.;  
SEMEENOVA, G.V., inzh.; PLATUNIN, Yu.S., gr. inzh.; VOL'NOVA, T.F.,  
tekhnik; SOLOV'YEV, M.I., inzh.; MOREV, I.A., tekhnik.

[Two-apartment house with two-room apartments; standard plan 1-102-5]  
Dvukhkvarturnyi zhiloi dom, kvartiry v dve komnaty; tipovoi proekt  
1-102-5. Mpskva, Al'bom 1. 1960. 27 p. (MIRA 14:10)

1. Moscow. Tsentral'nyy institut tipovykh proyektov.  
(Apartment houses--Designs and plans)

SHAMBERG, V.M.

ABRAMOV, V.A.; ALEKSEYEV, A.M.; AL'TER, L.B.; ARAKELYAN, A.A.; BAKLANOV, G.I.;  
BASOVA, I.A.; BLYUMIN, I.G.; BOGOMOLOV, O.T.; BOR, M.Z.; BREGEL',  
E.Ya.; VEYTSMAN, N.R.; VIKENT'YEV, A.I.; GAL'TSOV, A.D.; GERTSOVSKAYA,  
B.R.; GLADKOV, I.A.; DVORKIN, I.N.; DRAGILEV, M.S.; YEFIMOV, A.N.;  
ZHAMIN, V.A.; ZHUK, I.N.; ZAMYATNIN, V.N.; IGNAT'YEV, D.I.; IL'IN,  
M.A.; IL'IN, S.S.; IOFFE, Ya.A.; KAYE, V.A.; KAMENITSER, S.Ye.;  
KATS, A.I.; KLIMOV, A.G.; KOZLOV, G.A.; KOLGANOV, M.V.; KONTOROVICH,  
V.G.; KRAYEV, M.A.; KRONROD, Ya.A.; LAKHMAN, I.L.; LIVANSKAYA, F.V.;  
LOGOVINSKAYA, R.L.; LYUBOSHITS, L.I.; MALYSH, A.I.; MENZHINSKIY,  
Ye.A.; MIKHAYLOVA, P.Ya.; MOISEYEV, M.I.; MOSKVIN, P.M.; NOTKIN,  
A.I.; PARTIGUL, S.P.; PERVUSHIN, S.P.; PETROV, A.I.; PETRUSHOV, A.M.;  
PODGORNOVA, V.M.; RABINOVICH, M.A.; RYVKIN, S.S.; RYNDINA, M.N.;  
SAKSAGANSKIY, T.D.; SAMSONOV, L.N.; SMEKHOV, B.M.; SOKOLIKHIN, S.I.;  
SOLLERTINSKAYA, Ye.I.; SUDARIKOV, A.A.; TATAR, S.K.; TERENT'YEV,  
P.V.; TYAGAY, Ye.Ya.; FEYGIN, Ya.G.; FIGURNOV, P.K.; FRUMKIN, A.B.;  
TSYRLIN, L.M.; SHAMBERG, V.M.; SHAPIRO, A.I.; SHCHENKOV, S.A.;  
EYDEL'MAN, B.I.; EKHIN, P.E.; MITROFANOVA, S., red.; TROYANOVSKAYA, N.,  
tekh.n.red.

[Concise dictionary of economics] Kratkii ekonomicheskii slovar'.  
Moskva, Gos.izd-vo polit.lit-ry, 1958. 391 p. (MIRA 11:7)  
(Economics--Dictionaries)

SHAMBERG, Vladimir Mikhaylovich; PODGORNOVA, V., red.; MUKHIN, Yu.,  
tekh.red.

[For whom does time work; ten questions and answers about the  
seven-year plan and the economic competition between the U.S.S.R.  
and the United States] Na kogo rabotaet vremia; 10 voprosov i  
otvetov o semiletke i ekonomicheskom sorevnovanii mezhdru SSSR i  
SShA. Moskva, Gos.izd-vo polit.lit-ry, 1959. 63 p. (MIRA 12:11)  
(Russia--Foreign relations--United States)  
(Russia--Economic policy)

ARZUMANYAN, A.A., akademik, red.; RUMYANTSEV, A.M., red.; SHAMBERG, V.M., red.; ZHILIN, Yu.A., red.; ARDAYEV, G.B., red.; KUCHINSKIY, N.N., red.; KATSMAN, G.V., red.

[Problems of modern capitalism and the working class] Problemy sovremennogo kapitalizma i rabochii klass; materialy obmena mneniyami, provedennogo teoreticheskimi i informatsionnymi zhurnalami kommunisticheskikh i rabochikh partii "Problemy mira i sotsializma" i Institutom mirovoi ekonomiki i mezhdunarodnykh otnoshenii Akademii nauk SSSR. Prague, Izd-vo "Mir i sotsializm," 1963. 610 p. (MIRA 16:7)

1. Chlen-korrespondent AN SSSR (for Rumyantsev).  
(Capitalism) (Labor and laboring classes)

SHCHERBA, I.I., Veterinar, St. Petersburg, V.P., Veterinarnyy vrach  
(V.P. Veterinar, St. Petersburg, V.P. Veterinarnyy vrach); SHCHERBA,  
I.I., Veterinarnyy vrach (V.P. Veterinar, St. Petersburg, V.P. Veterinarnyy vrach);  
POPOVA, S.I., Referent

In the presence of people's democracy. Veterinarnaya (1) no. 1  
no. 1. Ja. 101. (MIRA 1:1)



SHANDEREV, Yu.N., starshiy nauchnyy sotrudnik, kand. sel'skokhoz. nauk;  
ATPASHKOV, V.A., starshiy nauchnyy sotrudnik, kand. sel'skokhoz.  
nauk

Use of anabolic preparations in fattening young cattle and sheep.  
Izv. TSKHA no.4:197-204 '65. (MIRA 18:11)

1. Kafedra molochnogo i myasnogo skotovodstva Moskovskoy sel'sko-  
khozyaystvennoy ordena Lenina akademii imeni Timiryazeva. Sub-  
mitted March 8, 1965.

SHKININ, A.B.; PAVLOV, S.M.; SHKININ, A.B., Veterinarnyy vestnik  
(Zhurnal Veterinarnoy Sotsialisticheskoy Respubliki); SHKININ, A.B.,  
Zhurnal Veterinarnoy Sotsialisticheskoy Respubliki; POPOVA, M.I., Veterinarnyy

In the countries of people's democracy. Veterinarnyy Vestnik 41 no.11  
1954-1955 (MIRA 1/53)

YENTUSHENKO, Gavriil Alekseyevich, SHAMLETOV, S., otv. red.;  
ANOKHINA, M.G., tekhn. red.

[Causes of the decrease of the sugar content of sugar beets  
in Kirghizistan] Prichiny snizheniia sakharistosti sakharnoi  
svekly v Kirgizii. Frunze, Izd-vo Akad. nauk Kirgizskoi SSR,  
1961. 66 p. (MIRA 15:10)  
(Kirghizistan--Sugar beets)

SEAMETOV, S. Sh.: Master Biol Sci (diss) -- "Secondary structural changes in the bark of annual suckers of woody plants". Leningrad, 1958. 20 pp (Acad Sci USSR, Botanical Inst im V. L. Komarov), 175 copies (KL, No 6, 1959, 130)